

# Taylor Winter

PHD CANDIDATE

☎ +64 22 171 1260 | ✉ [taylor.winter@vuw.ac.nz](mailto:taylor.winter@vuw.ac.nz)

## Summary

I am currently studying a PhD at the University of Victoria, Wellington while also working as a statistician at Statistics New Zealand. My core research is in social psychology, focusing on authoritarianism. Work has led to a broad range of experience in statistical methods including structural equation modelling, multi-level modelling, and Bayesian methods. As part of my study, I also share my statistical knowledge via means such as a tutorial article on informed Bayesian analysis, and the development of statistical software to make complex techniques more accessible.

I also work with Stats NZ and Ngāi Tahu providing statistical advice and conducting analytics. My specialty is Bayesian modelling and big data. This has led to me developing skill in reproducible workflows and project management techniques which I can bring to an academic role. Example projects include heading the development of an official statistic on poverty and pipeline development for cellphone data from Spark and Vodafone.

## Employment

### University of Otago

ASSISTANT RESEARCH FELLOW

2019 - Present

### Statistics New Zealand

SENIOR DATA SCIENTIST

2019 - Present

### Te Runanga o Ngai Tahu

STATISTICIAN

2018 - 2019

### Statistics New Zealand

STATISTICAL ANALYST

2016 - 2019

### University of Otago

SENIOR RESEARCH ASSISTANT

2013 - 2016

### Queensland Department of Natural Resources and Mines

PROJECT OFFICER

2013 - 2015

### University of Otago

RESEARCH ASSISTANT

2012 - 2014

## Education

### Victoria University of Wellington

DOCTOR OF PHILOSOPHY

Wellington

Present

### University of Otago

MASTER OF SCIENCE

Dunedin

2016

## Awards and scholarships

2018 IPANZ Young Professional Of The Year (Top 3)

Institute of Public  
Administration NZ

2018 Victoria Doctoral Scholarship

Victoria University  
of Wellington

2015 Otago Research Master's Scholarship

University of Otago

## Publications

1. Winter, T, P Jose, B Riordan, B Bizumic, T Ruffman, J Hunter, and D Scarf (In Review). Left-wing support of authoritarian submission to protect against societal threat. *Political Psychology*.
2. Riordan, B, T Winter, J Flett, D Scarf, P Jose, and T Conner (In Review). Does the Fear of Missing Out (FoMO) moderate the relationship between social networking use and affect? A daily diary study. *Computers in Human Behavior*.
3. Winter, T, B Riordan, A Surace, D Scarf, and P Jose (2020). A tutorial on the use of informative Bayesian priors for minority research.
4. Winter, T, T Conner, and P Jose (Accepted). Methodological and conceptual complexities of assessing relationships between single-occasion CRP inflammation and daily affect. *Brain, Behavior, and Immunity - Health*.
5. Zimmerman, H, B Riordan, T Winter, A Bartonicek, and D Scarf (Accepted). Are New Zealand psychology students more susceptible to essentialist explanations for mental illness? Neuroessentialism and mental illness stigma in psychology and non-psychology students. *New Zealand Journal of Psychology*.
6. Scarf, D, T Winter, B Riordan, J Hunter, K Tustin, M Gollop, N Taylor, J Kokaua, and R Poulton (Accepted). A longitudinal study of mental wellbeing in students that transition into PhD study. *Frontiers in Psychology*.
7. Raubenheimer, JE, BC Riordan, JE Merrill, T Winter, RM Ward, D Scarf, and NA Buckley (2021). Hey Google! will New Zealand vote to legalise cannabis? Using Google Trends data to predict the outcome of the 2020 New Zealand cannabis referendum. *International Journal of Drug Policy*.
8. Winter, T, B Riordan, A Pakpour, M Griffiths, A Mason, J Poulgrain, and D Scarf (2020). Evaluation of the English version of the Fear of COVID-19 Scale and its relationship with behavior change and political beliefs. *International Journal of Mental Health and Addiction*.
9. Riordan, BC, J Raubenheimer, RM Ward, JE Merrill, T Winter, and D Scarf (2020). Monitoring the sentiment of cannabis-related tweets in the lead up to New Zealand's cannabis referendum. *Drug and Alcohol Review*.
10. Scarf, D, H Zimmerman, T Winter, H Boden, S Graham, BC Riordan, and JA Hunter (Apr. 2020). Association of Viewing the Films Joker or Terminator: Dark Fate With Prejudice Toward Individuals With Mental Illness. *JAMA Network Open*.
11. Graham, S, A Mason, B Riordan, T Winter, and D Scarf (Dec. 2020). Taking a Break from Social Media Improves Wellbeing Through Sleep Quality. *Cyberpsychology, Behavior, and Social Networking*.
12. Winter, T, T Conner, and P Jose (2020). Identifying Profiles of Affective Change: An Ecological Momentary Assessment of Flourishers. *Emotion*.
13. Trevis, KJ, E McTavish, T Winter, Y Fu, J McTavish, B Wilson, J Oliver, and EA Franz (2019). Harnessing the Brain's Neuro-Compensatory Processes: Lessons from a High-Functioning Person with Complete Agenesis of the Corpus Callosum. *Neuropsychologie clinique et appliquée*.
14. Winter, T, B Riordan, and A Surace (2019). The relationship between hazardous alcohol use and discrimination among Māori in Aotearoa New Zealand. *Addiction*.
15. Surace, A, B Riordan, and T Winter (2019). Do New Zealand sexual minorities engage in more hazardous drinking than non-sexual minorities? *Drug and Alcohol Review*.
16. Pittar, N, T Winter, L Falland-Cheung, D Tong, and J Waddell (2018). Scalp simulation – A novel approach to site-specific biomechanical modeling of the skin. *Journal of the Mechanical Behavior of Biomedical Materials*.
17. Falland-Cheung, L, JN Waddell, MS Lazarjan, MC Jermy, T Winter, D Tong, and PA Brunton (2017). Use of agar/glycerol and agar/glycerol/water as a translucent brain simulant for ballistic testing. *Journal of the Mechanical Behavior of Biomedical Materials*.
18. Franz, EA, Y Fu, M Moore, T Winter, T Mayne, R Debnath, and C Stringer (2016). Fooling the brain by mirroring the hand: brain correlates of the perceptual capture of limb ownership. *Restorative neurology and neuroscience*.
19. Tong, D, T Winter, J Jin, A Bennett, and J Waddell (2015). Quantification of subconcussive impact forces to the head using a forensic model. *Journal of Clinical Neuroscience*.
20. Winter, TJ and EA Franz (2014). Implication of the anterior commissure in the allocation of attention to action. *Frontiers in Psychology*.

## Presentations and posters

### Authoritarian submission on the left and right during the covid-19 pandemic in New Zealand

2020

NEW ZEALAND PSYCHOLOGICAL SOCIETY CONFERENCE, WELLINGTON

### Using overseas surveys to produce reliable models of sexual minorities

2019

NEW ZEALAND POPULATION CONFERENCE, WELLINGTON

### Alcohol use disparities among gender and sexual minorities in New Zealand (Poster)

2019

COLLABORATIVE PERSPECTIVES ON ADDICTION, RHODE ISLAND

<b>Iwi data tool using integrated data and R Shiny</b> IWI DATA CONFERENCE, CHRISTCHURCH	2017
<b>Using data to support a collective impact model of Maori potential</b> POPULATION ASSOCIATION OF NEW ZEALAND CONFERENCE, CHRISTCHURCH	2016
<b>The effect of motherhood on income</b> NEW ZEALAND ASSOCIATION OF ECONOMISTS CONFERENCE, WELLINGTON	2016
<b>A machine learning approach to classifying life course outcomes</b> LONGITUDINAL AND MULTIVARIATE ANALYSIS NETWORK (STATS NZ), WELLINGTON	2016
<b>Methodology for comparing incomes between parents and non-parents</b> STATISTICAL METHODS SEMINAR (STATS NZ), WELLINGTON	2016
<b>Inter-hemispheric inhibition in the autistic brain</b> NEUROETHICS SEMINAR, DUNEDIN	2014

## Skills

---

- Health psychology research
- Research design and analysis
- Structural equation modelling and causal analysis
- Bayesian statistics and multi-level modelling
- Machine learning techniques such as random forests and neural nets
- Teaching reproducible research practices and statistics
- Knowledge of Tikanga Māori